

APPROVAL OF PLANS AND SPECIFICATIONS TO CONSTRUCT OR ENLARGE A DAM OR TO REPAIR OR ALTER A DAM OR RESERVOIR

OVERVIEW

Since August 1929, the State of California has supervised dam construction and modifications, to safeguard life and protect property by preventing dam failure. The California Department of Water Resources (DWR) [Division of Safety of Dams \(DSOD\)](#) is responsible for permitting and approving dams and water storage reservoirs as defined in California Water Code Sections 6002–6004, except those owned by the United States. Any entity that proposes to construct a dam or to enlarge or modify an existing dam or reservoir that would fall under DSOD jurisdiction must obtain written approval of the plans and specifications from DSOD.

[Figure 18](#) illustrates the process for DSOD approvals.

WHO NEEDS TO COMPLY?

DSOD approval may be required for any CALFED actions that involve construction, modification, and removal of dams, levees, artificial ponds, reservoirs, or other structures that are under or would fall under DSOD jurisdiction. DSOD has jurisdiction over any artificial barrier to impound or divert water that:

- is or will reach a height of at least 25 feet above the natural bed of the watercourse at the downstream toe of the barrier to the maximum possible water storage elevation;
- is or will reach a height of at least 25 feet above the lowest outside elevation to the maximum possible water storage elevation, if the barrier is not across a stream channel; or
- has or will have the capacity to impound at least 50 acre-feet (af) of water.

WHO IS EXEMPT?

DWR jurisdiction does not apply to:

- federally constructed projects;
- levees of an island adjacent to tidal waters in the Sacramento–San Joaquin Delta (as defined in Section 12220 of the California Water Code), if the maximum possible water storage elevation of the impounded water does not exceed 4 feet above mean sea level, as established by the U.S. Geological Survey 1929 datum;
- dams or levees with a height of 6 feet or less, regardless of impounding capacity;
- dams or levees of any height if the impounded capacity is 15 af or less;

- obstructions in canals used to raise, lower, or divert water;
- levees with the principal purpose of flood control or use for railroad, road, or highway fills or structures;
- steel or concrete circular tanks or tanks elevated above ground;
- barriers that do not cross stream channels, watercourses, or natural drainage areas that are used to impound water for agricultural purposes or for sewage sludge-drying facilities; and
- barriers with a height of 15 feet or less in the channel of a stream or watercourse that are used to spread water upstream for groundwater percolation.

Other specific exemptions, which relate principally to wastewater treatment plants, are included in Sections 6004 and 6025 of the California Water Code.

HOW LONG DOES THE APPROVAL PROCESS TAKE?

DSOD may take 6 months to approve construction, modification, or enlargement of a dam or reservoir.

WHAT INFORMATION DOES THE APPLICANT NEED TO PROVIDE?

The applicant proposing construction or enlargement of a dam or reservoir must submit the following:

- two copies of Form DWR-3, “Application for Approval of Plans and Specifications for the Construction or Enlargement of a Dam and Reservoir” (one additional copy is to be sent to the Fish and Game Commission if the dam is in a stream), that describe:
 - the purpose for which the impounded or diverted water is to be used;
 - the location, type, and proportions of the proposed dam and reservoir and appurtenant works;
 - the storage capacity of the reservoir; and
 - the area of the drainage basin, rainfall and streamflow records, and floodflow records and estimates;
- two copies of plans prepared by a registered civil engineer;
- specifications in duplicate;

- evidence of water rights; and
- information to enable DWR to comply with CEQA. This should include, as appropriate, a copy of the final adopted environmental impact report (EIR) or initial study/negative declaration prepared by a lead agency, or data necessary for DWR to act as lead agency to prepare the environmental documentation.

DSOD may require the applicant to submit additional information, such as soils data, logs of borings or other exploratory data, geologic reports, hydrologic data, and structural and hydraulic design notes.

An applicant proposing to repair or alter a dam or reservoir must submit the same information as for construction or enlargement, except that:

- Form DWR-4, “Application for Approval of Plans and Specifications for the Repair of a Dam or Reservoir”, is used, specifying the changes proposed;
- plans and specifications may not be required for minor repair work;
- evidence of water rights is not required; and
- repair and maintenance may qualify for an exemption under CEQA.

An applicant proposing to remove a dam and reservoir must submit the same information as for construction or enlargement, except that Form DWR-5 is used and evidence of water rights is not required.

WHAT IS THE FEE?

DSOD charges a filing fee of at least \$300 for dam or reservoir construction or enlargement projects; additional application fees vary with the estimated cost of the dam. Applicants should contact DWR to receive updated fee information. There is no filing fee for approval of plans to repair or alter a dam or reservoir or remove a dam and reservoir.

WHAT DOES THE APPLICATION AND EVALUATION PROCESS ENTAIL?

1. Within 30 days after receipt of an application, DSOD informs the applicant whether the application is complete or other information is needed.
2. A DSOD engineer reviews the plans, specifications, and other information supplied by the applicant and inspects the project site. DSOD also attempts to inspect representative data from field exploration and unique laboratory tests, and other data when reviewing plans for proposed facilities. DSOD then identifies any changes in the plans and specifications and any supplemental data necessary for approval.

3. The applicant submits signed drawings and final specifications when review comments are resolved. Any comments based on preliminary plans and data are not binding on DSOD's later consideration of applications.
4. In DSOD matters relating to CEQA, DWR is either the lead or responsible agency for dams and reservoirs. Usually, DSOD conducts preliminary reviews of dam and reservoir proposals before environmental documentation is prepared. Enlargement of a dam may fall under the jurisdiction of the Federal Energy Regulatory Commission if there is a power component to the enlargement.
5. The right to appropriate water does not come with approval of an application to construct a dam. Applicants must apply to the State Water Resources Control Board to obtain or modify water rights (see "Surface Water Rights").

DOES THIS PROCESS TRIGGER THE NEED FOR COMPLIANCE WITH OTHER REGULATIONS?

CEQA compliance must be completed before DSOD may approve construction, enlargement, or removal of a dam or reservoir. If a proposed dam enlargement would result in the inundation of a substantial area, a federal agency with jurisdiction over the area may require an environmental impact statement (EIS) or a joint EIR/EIS with the CEQA lead agency for the proposed project.

WHAT ARE THE OPPORTUNITIES FOR FACILITATING COMPLIANCE WITH THIS PROCESS?

The following are recommended steps to simplify and streamline the DSOD process for CALFED actions.

- **Consult with DSOD early in project planning and throughout the application process.** Preapplication meetings with DSOD are not required. Early involvement of DSOD in projects can significantly reduce approval time, however. DSOD recommends the following:
 - CEQA scoping meetings;
 - early site visits;
 - discussions of the preliminary design;
 - reviews of the project schedule; and
 - submittal of preliminary 60% plans, specifications, and geologic data to expedite review leading to final approval.

If the applicant consults with DSOD in the early stages of project planning, DSOD can identify any special dam design features that may be recommended or required for the proposed dam size and location. With continued coordination throughout the

permit application process, issues can be identified and resolved more easily. There may be opportunities to redesign the project to avoid DSOD jurisdiction.

- **Determine whether a dam failure risk analysis is required.** Applicants should consult with DSOD to determine what type of dam failure risk analysis is required, if any.



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